

UNIROSS

BATTERIES (PTY) LIMITED

SPECIALISTS IN BATTERY TECHNOLOGY



Power to depend on

Integrity throughout 21 years' experience in battery technology, manufacturing and marketing has honed a leading edge for Uniross. The company policy of supplying reliable, high-quality batteries that are cost effective is an approach that has proved universally successful.

The enduring objective is to develop and further strengthen Uniross' position as the leading manufacturer of advanced battery systems, whilst also maintaining the availability of systems that meet the ever-increasing demands of high technology.

Uniross represents world leaders in battery manufacture, technology and development. Uniross stocks a wide range of rechargeable nickel cadmium,

lithium, lead acid, as well as other batteries based on advanced chemical systems. Through its on-going contact with world markets, Uniross has access to an ever-growing range of specialised batteries.

The company also commands a major share of the market for two-way radio replacement battery packs. These are assembled in the modern Uniross factory with a full range always being available.

Uniross devotes constant, meticulous attention to all aspects of design, manufacture, quality-assurance and control programmes, ensuring that price, performance, as well as availability and reliability meet the stringent specifications the company has set itself.



• Welding operation



• Ultrasonic welding



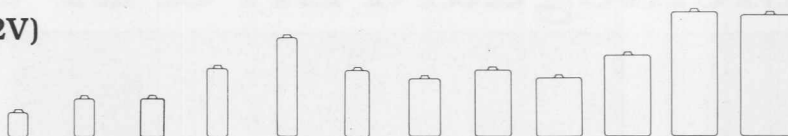
• Foam filling



• Quality assurance

VR Series

Cylindrical Standard (1,2V)



Type		VR 0,11	VR 0,25	VR 0,5	VR 0,5	VR 0,8	VR 0,8	VR 1,2	VR 2	VR 2,5	VR 4	VR 7	VR 10
Size		1/3AA	1/2AA	2/3AF	AA	3/2AA	AF	C _s	C	2/3D	D	F	SF
Rated Capacity C ₅	Ah	0,11	0,25	0,5	0,5	0,85	0,8	1,2	2	2,5	4	7	10
Temperature Range	°C	-30/+50	-30/+50	-30/+50	-30/+50	-30/+50	-30/+50	-30/+50	-30/+50	-30/+50	-30/+50	-30/+50	-30/+50
Maximum Power	Watts	10	13	17	17	25	25	50	50	70	85	95	130
Normal Charge 16 Hours @	mA	11	25	50	50	80	80	120	200	250	400	700	1000
Maximum Accelerated Charge 3,5 Hours @	mA	40	100	180	200	320	320	480	600	500	800	1400	—
Diameter	mm	14,4	14,4	17,3	14,4	14,4	17,3	22,7	25,9	32,9	32,9	32,9	41,7
Height	mm	17,4	28,2	28,1	50,2	73	49,2	42,1	49,7	43,5	60,5	91,3	89,2
Mass	g	11	14	21	24	37	37	51	77	105	150	240	400

VE Series

Cylindrical High Energy (1,2V)

Type		VEAA	VEAF	VEC _s	VED
Rated Capacity @ 20°C C ₅	Ah	0,7	1,0	1,4	4,5
Nominal Voltage @ 20°C	V	1,2	1,2	1,2	1,2
Temperature Range	°C	-30/+50	-30/+50	-30/+50	-30/+50
Normal Charge 16 Hrs @ 20°C	mA	70	100	140	450
Accelerated Charge 4 Hours @	mA	210	300	420	900
Accelerated Discharge 30min	mA	1400	2000	2800	9000
60min	mA	700	1000	1400	4500
Diameter	mm	14,4	14,4	22,5	32,7
Height	mm	49,0	49,2	41,9	58,3
Mass	g	25	37	52	154

VT Series

Cylindrical High Temperature (1,2V)

Size		VTAA	VTC _s	VTC	VTD	VTF
Rated Capacity (at 20°C) C ₅	Ah	0,5	1,2	1,8	4,0	7,0
Nominal Voltage (at 20°C)	V	1,2	1,2	1,2	1,2	1,2
Temperature Range	°C	-20/+65	-20/+65	-20/+65	-20/+65	-20/+65
Charging Current (for 16 Hrs @ 20°C)	mA	50	120	180	400	700
Diameter	mm	14,25	22,35	25,70	32,70	32,70
Height	mm	50	41,90	47,70	60,50	89,10
Mass	g	24	51	72	140	225

VB-E Series

Button Unique Sintered Plate High Discharge Technology

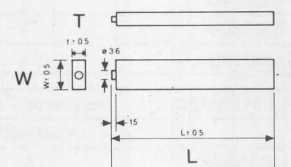
(1,2V)

Type		VB-4E	VB-10E	VB-22E	VB-30E	VB-60E
Rated Capacity C ₅	mAh	40	100	220	300	600
Normal Charge 15 Hrs @ 20°C	mA	4	10	22	30	60
Maximum Continuous Discharge @ 20°C	mA	200	1000	2200	3000	6000
Temperature Range	°C	-40/+50	-40/+50	-40/+50	-40/+50	-40/+50
Diameter	mm	15,7	23,0	25,1	34,7	34,7
Height	mm	6,0	5,3	7,8	5,5	9,8
Mass	g	3,5	7	12	18	31

GP Series

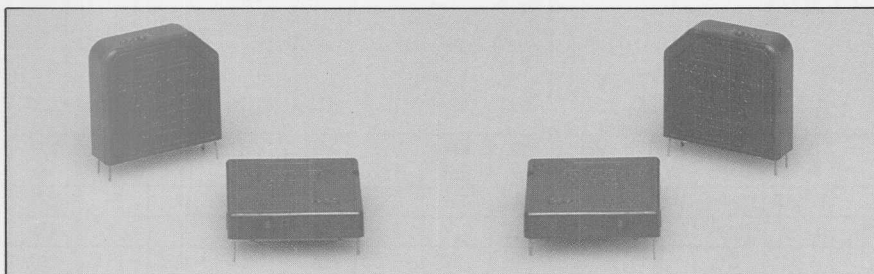
Rectangular (1,2V)

	Capacity mAh	L	W	T	Mass (g)
GP3	300	48	16,4	5,6	17
GP5	450	67	16,4	5,6	23
GP7	700	67	16,4	7,8	32
GP10	1200	105	16,4	7,8	50



With sleeve (t) = t + 0.2

Memoguard LH & LF Series (3,0V)



The Memoguard range of non-rechargeable energy sources featuring the latest advances in lithium battery technology perfectly meet the requirements of the microelectronics industry that need batteries to provide standby power in RAM memory applications.

MOUNTING

D.I.L. packaged with standard fixings for direct mounting on to a PCB permits manual hot iron or flow soldering.

SAFETY

In the event of an accident or controlled short circuit (flow soldering) the power delivered is kept to a safe level by the batteries self limiting mechanism. Batteries feature self-extinguishing, insulated cases; oxygen index 28.

LIFE EXPECTANCY

Electrochemical stability. Very low self

discharge. Resistant to thermal and mechanical shock including vibration. Rate of failure comparable with other electronic components with a life expectancy of 10 years at room temperature.

HERMETICITY

The combination of resin encapsulation and cell seal ensures complete Unit hermeticity under normal usage conditions.

HOUSING

Non flammable and resistant to attack by cleaning solvents used in the electronic industry.

Mould visual indicator.

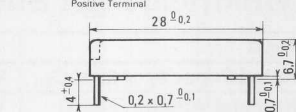
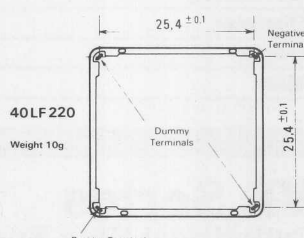
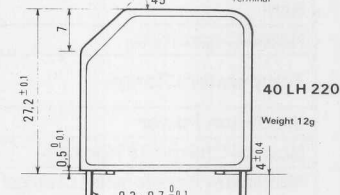
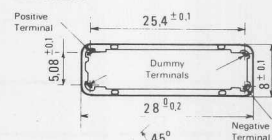
Polarities as marked.

4 Connections.

Tinned for ease of soldering.

Pin spacing 0.1" modules (2.54mm).

Dimensions



TYPE		40 LH220	40 LF220
Nominal capacity	mAh		200
Open circuit voltage	Volts		3,5
Nominal voltage	Volts		3,0
Maximum recommended current drain	mA		3,0
Operating temperature range	°C	-40 to +70	
Storage temperature range	°C	-40 to +70	
Width/Depth	mm	W28,0 D8,0	W28,0 D28,0
Height	mm	27,2	6,7
Mass	g	12	10

Dataguard LD & LDH Series (3,0V)

The PCB mountable range of 3 Volt non-rechargeable energy systems developed to guarantee continuity of power to volatile C-MOS RAM devices for up to 10 years under mains power failure mode conditions; and other low drain devices designed to function in and above ambient temperatures.

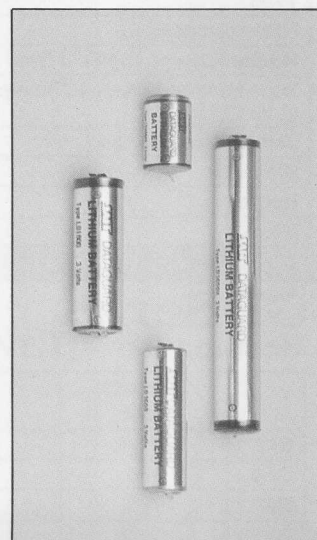
DATAGUARD is classified as one of the **safest** lithium systems, batteries possess the most

important features demanded – reliability, circuit compatability, diverse operating characteristics.

Its electrochemical stability and simplicity of construction make it one of the most economical and cost effective advanced primary batteries to be released in recent years for powering low drain devices.

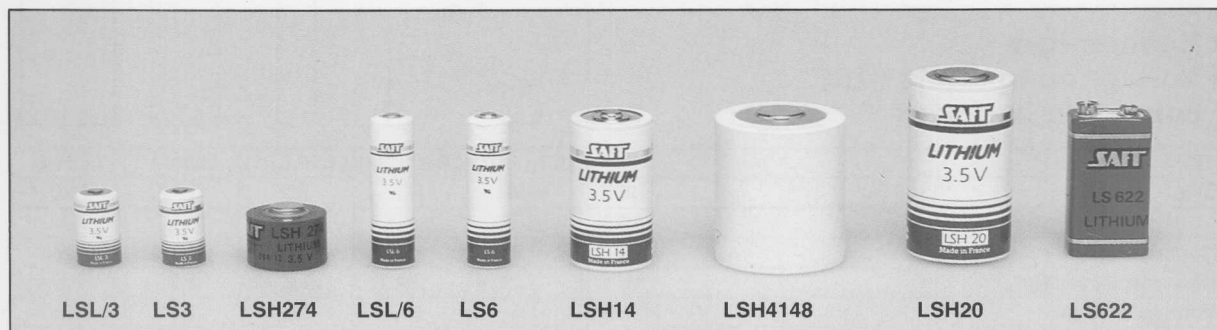
LD Series	Standard Temperature –40°C to +70°C			
	Voltage V	Capacity mAh	Length mm	Diameter mm
LD0500	3	400	25	14,6
LD1600	3	1600	51	14,6
LD3600	3	3600	101	14,6

LDH Series	Extended Temperature –55°C to +100°C			
	Voltage V	Capacity mAh	Length mm	Diameter mm
LD0500H	3	400	26,5	15,7
LD1600H	3	1600	51	15,7
LD3600H	3	3600	101	15,7



Lithium-thionyl chloride

Li-SOCl₂ (3,6V)



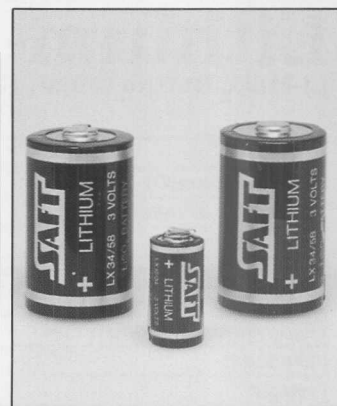
TYPE		LSL/3	LS3	LSH274	LS120	LSL/6	LS6
Size	IEC	R3	R3	26180	12420	R6	R6
	ANSI	1½AA	1½AA	—	—	AA	AA
Nominal capacity	mAh	850	850	1000	1100	1800	1800
Open circuit voltage	Volts	3,67	3,67	3,67	3,67	3,67	3,67
Nominal voltage	Volts	3,5	3,5	3,5	3,5	3,5	3,5
Maximum recommended current drain	mA	5	50	500	50	10	100
Operating temperature range	°C	-40 to +75	-40 to +75	-40 to +75	-40 to +75	-40 to +75	-40 to +75
Storage temperature range	°C	-55 to +75	-55 to +75	-55 to +75	-55 to +75	-55 to +75	-55 to +75
Diameter	mm	14,5	14,5	26,2	12,5	14,5	14,5
Height	mm	25	25	18,7	42	50	50
Mass	g	8,5	8,5	25	10,5	15,5	15,5

TYPE		LSH14	LSH14-2	LSH4148	LSH20	LSH20-2	LS622
Size	IEC	R14	Double R14	—	R20	Double R20	622
	ANSI	C	CC	1½ SF	D	DD	9V
Nominal capacity	mAh	5000	9000	13000	10000	18000	1100
Open circuit voltage	Volts	3,67	3,67	3,67	3,67	3,67	7,34
Nominal voltage	Volts	3,5	3,5	3,5	3,5	3,5	7
Maximum recommended current drain	mA	600	1500	4000	4000	2000	50
Operating temperature range	°C	-40 to +75	-40 to +75	-40 to +75	-40 to +75	-40 to +75	-40 to +75
Storage temperature range	°C	-55 to +75	-55 to +75	-55 to +75	-55 to +75	-55 to +75	-55 to +75
Diameter	mm	26,2	26,2	41,5	33,5	33,5	26 x 17
Height	mm	50	100	49,1	61,5	123	49
Mass	g	56	105	150	120	180	36

Lithium-sulphur dioxide

Li-SO₂ (3,0V)

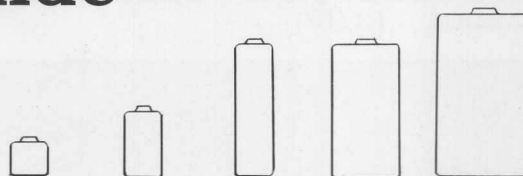
TYPE		LX16/22	LX16/34	LX19/78	LX26/49	LX34/57
Size	IEC	—	—	—	R14	R20
	ANSI	1½A	2¾A	—	C	D
Nominal capacity	mAh	500	850	3000	3500	7500
Open circuit voltage	Volts	3	3	3	3	3
Nominal voltage	Volts	2,8	2,8	2,8	2,8	2,8
Max. recomm. current	mA	—	225	—	1000	2000
Operating temp. range	°C	-55 to +70	-55 to +70	-55 to +70	-55 to +70	-55 to +70
Storage temp. range	°C	-55 to +70	-55 to +70	-55 to +70	-55 to +70	-55 to +70
Diameter	mm	16,8	16,8	19,6	26,2	34,2
Height	mm	26,7	35,1	82,3	50	61,5
Mass	g	10	14	37	43	85



Lithium-copper oxide

Li-CuO (1,5V)

- Economical
- Voltage compatible with consumer batteries



TYPE		LC7(LC07)	LC3(LC02)	LC6(LC01)	LCH14	LCH20
Size	IEC	1/4R6	R3	R6	R14	R20
	ANSI	1/4AA	1/2AA	AA	C	D
Nominal capacity	Ah	0,4	1,6	3,6	10	20
Open circuit voltage	Volts	2,2	2,2	2,2	2,2	2,2
Nominal voltage	Volts	1,5	1,5	1,5	1,5	1,5
Maximum recommended current drain	mA	8	20	45	600	1000
Operating temperature range*	°C	-40 to +70	-40 to +70	-40 to +70	-40 to +60	-40 to +60
Storage temperature range	°C	-40 to +70	-40 to +70	-40 to +70	-40 to +60	-40 to +60
Diameter	mm	14	14	14	25,5	34,2
Height	mm	12,5	25	50	50	61,5
Mass	g	4,5	7,3	17,4	56	110

*For thermal cycling recommendation please consult Uniross.

Lithium-copper oxyphosphate

Li-Cu₄O (PO₄)₂ (2,5V)

- Extremely high temperature operating range



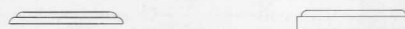
TYPE		LCP3	LCP6	LCP3HT	LCP6HT	LCP14HT
Size	IEC	R3	R6	R3	R6	R14
	ANSI	1/2AA	AA	1/2AA	AA	C
Nominal capacity	Ah	0,9	2,3	0,8	1,9	5
Open circuit capacity	Volts	2,8	2,8	2,8	2,8	2,8
Nominal voltage	Volts	2,5	2,5	2,5	2,5	2,5
Maximum recommended current drain	mA	20	40	**	**	**
Operating temperature range*	°C	-40 to +70	-40 to +70	0 to +175	0 to +175	0 to +175
Storage temperature range	°C	-40 to +70	-40 to +70	-40 to +70	-40 to +70	-40 to +70
Diameter	mm	14	14	14	14	25,5
Height	mm	25	50	25	50	50
Mass	g	7	17	7	18	55

*For thermal cycling recommendations please consult Uniross.

**Dependent upon operating temperature. Consult Uniross.

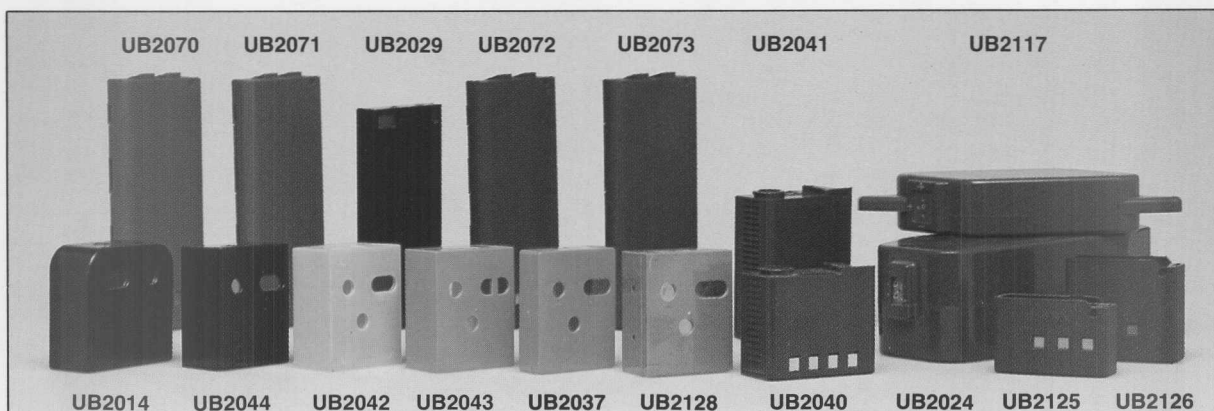
Lithium-manganese dioxide

Li-MnO₂ Button Cells (3,0V)



TYPE		2016	2025	2032	2430	2450
Nominal capacity	mAh	70	140	180	200	500
Open circuit voltage	Volts	3,5	3,5	3,5	3,5	3,5
Nominal voltage	Volts	3	3	3	3	3
Maximum recommended current drain	mA	2	2	2	3	10
Operating temperature range	°C	-20 to +50	-20 to +50	-20 to +50	-20 to +50	-20 to +50
Storage temperature range	°C	-20 to +50	-20 to +50	-20 to +50	-20 to +50	-20 to +50
Diameter	mm	20,1	20,1	20,1	24,5	25,1
Height	mm	1,7	2,6	3,3	3,0	5,1
Mass	g	1,7	2,5	3	4	7

MOTOROLA



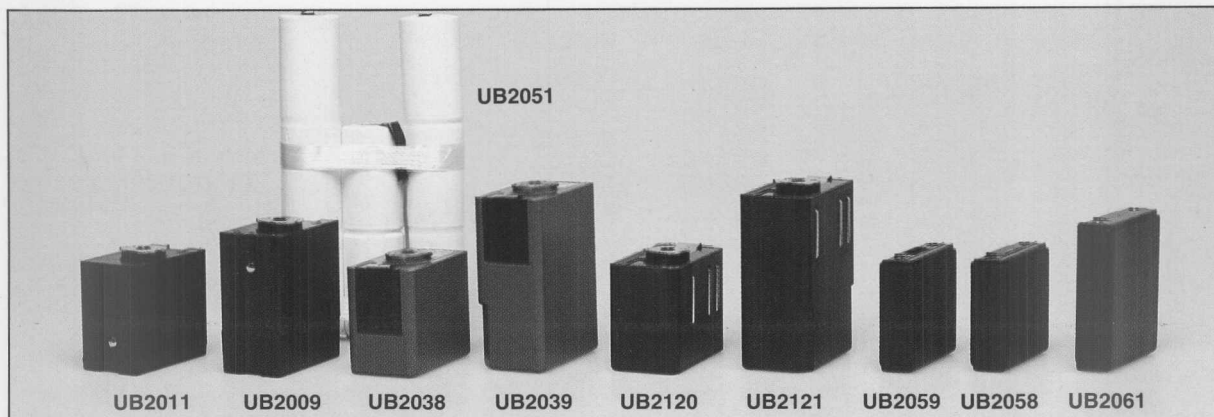
Uniross Code	Cross Reference	Used in	Case Colour	Case Colour	Capacity mAh	Volts	Dimensions mm
UB2014	NLN6238A 60-84735H01	HT200	■	■	500	14,4	71 x 71 x 34
UB2044	NLN6761A 60-84642H01	HT220 HT210	■	■	500	15	70 x 55 x 32
UB2045	NLN6682A 60-84643H01	HT220 slimline	■	■	200	15	70 x 55 x 18
UB2042	NLN6900A 60-84636H01	HT220 omni rapid	■	■	500	15	70 x 55 x 32
UB2046	NLN6899A 60-84641H01	HT220 rapid slimline	■	■	200	15	70 x 55 x 18
UB2043	NLN4463A 60-5742E01	MT500 omni rapid	■	■	500	15	70 x 55 x 32
UB2037	NLN4462A 60-5737E01	MT500 rapid slimline	■	■	225	15	70 x 55 x 18
UB2128	NLN8232B 60-5295A03	MT500 HT220 rapid (●/is)	■	■	500	15	70 x 55 x 32
UB2029	NLN8002A 60-82324J01	MH10 MH70	■	■	500	12	144 x 64 x 17
UB2035	NLN8096A 60-82387J01	MH10 MH70 rapid	■	■	500	12	144 x 64 x 17
UB2040	NLN8834B 60-5201E06	MX300 rapid	■	■	850	7,5	69,5 x 36 x 61
UB2041	NLN8835B NLN5860A	MX300 rapid	■	■	1200	7,5	69,5 x 36 x 94
UB2129	NLN5860B 60-60930A02 NLN9040A	MX300 rapid (●/is)	■	■	1200	7,5	69,5 x 36 x 94
UB2070	NLN7435A 60-5928J04	HT90 std	■	■	500	12	161 x 65 x 19
UB2071	NLN7434A 60-5928J02	HT90 rapid charge	■	■	500	12	161 x 65 x 19
UB2074	NLN7640B 60-5928J05	HT90 rapid (●/is)	■	■	500	12	161 x 65 x 19
UB2072	NLN7401A 60-5928J03	HT440 std	■	■	500	12	161 x 65 x 19
UB2073	NLN7694A 60-5928J01	HT440 rapid charge	■	■	500	12	161 x 65 x 19
UB2117	NLN6267A N65	PT300	■	■	1000	13,2	186 x 78 x 37
UB2118	NLN5205P		■	■	1000	14,4	186 x 78 x 37
UB2024	NLN6408A 60-83420D01	PT400	■	■	4000	14,4	200 x 81 x 66
UB2125	NLN7161A 60-5261L01	Expo light duty	■	■	250	7,5	65 x 25 x 43
UB2126	NLN7162A 60-5261L02	Expo medium duty	■	■	500	7,5	65 x 25 x 59

ICOM



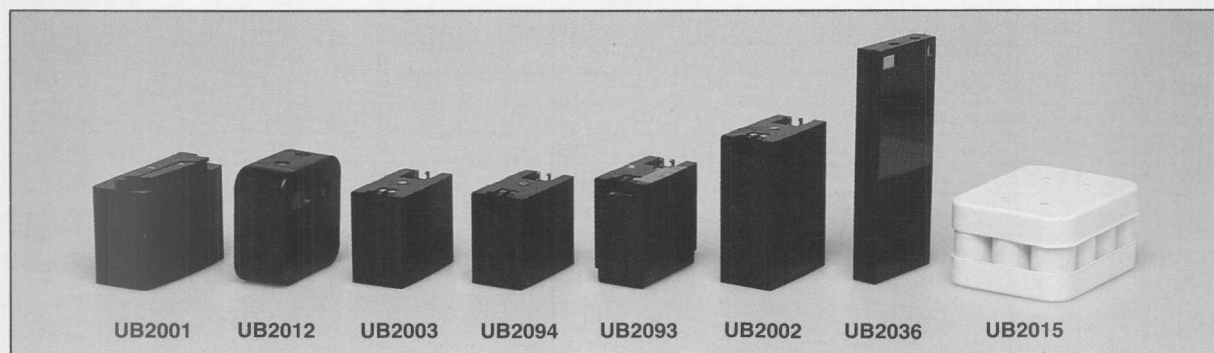
Uniross Code	Cross Reference	Used in	Case Colour	Capacity mAh	Volts	Dimensions mm
UB2160	IC BP2		■	500	7,2	65 x 35 x 42
UB2161	IC BP3		■	250	8,4	65 x 35 x 42
UB2162	IC BP5		■	500	10,8	65 x 35 x 59
UB2163	IC BP7		■	500	13,2	65 x 35 x 80
UB2164	IC BP8		■	1000	8,4	64 x 36 x 80
UB2165			■	1000	13,2	64 x 36 x 109

GENERAL ELECTRIC



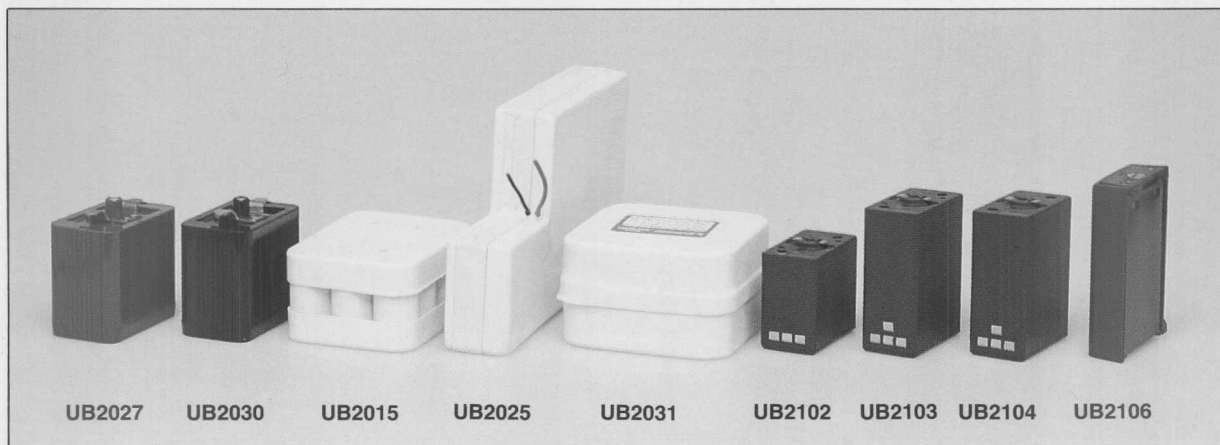
Uniross Code	Cross Reference	Used in	Case Colour	Capacity mAh	Volts	Dimensions mm
UB2010	PL19D413522G1	PE series	■	600	7,5	63,5 x 36 x 53
UB2011	PL19D413522G4	PE series	■	800	7,5	63,5 x 36 x 60
UB2009	PL19D413522G6	PE series (●/is)	■	800	7,5	63,5 x 35 x 73
UB2051	PL19D417815G1/19A134172P1	Portamobile II refill no case	■	4000	10	177 x 98 x 35
UB2038	PL19D429763G1	MPR (grey) MPS	■	800	7,5	68,6 x 39 x 59
UB2039	PL19D429777G1	MPR (grey) MPS	■	1200	7,5	68,6 x 39 x 98
UB2122	PL19D429777G2	MPR (grey) (●/is)	■	1200	7,5	68,6 x 39 x 98
UB2120	PL19D429763G3	MPX (black)	■	800	7,5	68,6 x 39 x 59
UB2121	PL19D429777G3	MPX (black)	■	1200	7,5	68,6 x 39 x 98
UB2123	PL19D429777G4	MPX (black) (●/is)	■	1200	7,5	68,6 x 39 x 98
UB2059	PL19D900639G1/G2	MPI 2W	■	500	7,5	62,9 x 58,7 x 20
UB2058		MPI 2W (●/is)	■	500	7,5	62,9 x 58,7 x 20
UB2061	P19D900639G3	MPI 4W	■	500	10	62,9 x 75,7 x 20

REPCO



Uniross Code	Cross Reference	Used in	Case Colour	Capacity mAh	Volts	Dimensions mm
UB2001	810-156-01	Tek10/8	■	500	14,4	83 x 43 x 65
UB2012	810-188-01 N64	Clamshell	■	500	14,4	71 x 55 x 34
UB2003	817-005-01	RPX, Tek10/2	■	500	12	56 x 36 x 66
UB2094	817-066-01	RPX, Tek10/2 rapid	■	500	12	56 x 36 x 66
UB2007		RPX Tek10/2 std term (●/is)	■	500	12	56 x 36 x 66
UB2092	817-124-01	RPX Hi-capacity rapid (●/is)	■	700	12	91 x 36 x 66
UB2093		RPX Tek10/2 Repco term (●/is)	■	500	12	56 x 36 x 66
UB2002	817-125-01	RPX Tek10/2 hi-capacity	■	700	12	91 x 36 x 66
UB2055	816-007-01	Mobile portable	■	1000	13,2	153 x 53 x 36
UB2036	821-006-01	PC400 Standard	■	500	12	144 x 59 x 17
UB2119	821-007-01	PC400 Rapid	■	500	12	144 x 59 x 17
UB2015		Packset	□	2000	14,4	104 x 78 x 53

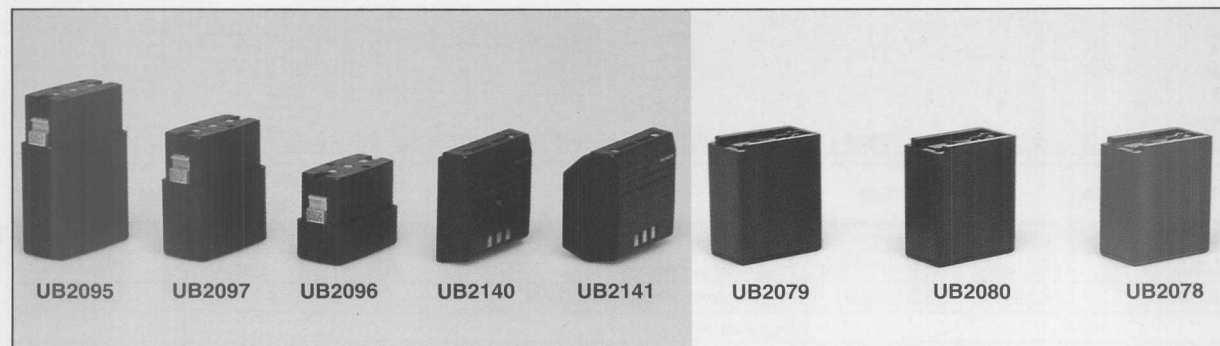
PHILIPS/PYE



Uniross Code	Cross Reference	Used in	Case Colour	Capacity mAh	Volts	Dimensions mm
UB2027		SXA (grey)	■	700	12	74 x 43 x 65
UB2030		SNA (black)	■	800	9,6	74 x 43 x 65
UB2015		Packset	□	2000	14,4	104 x 78 x 53
UB2025		Eland	□	4000	12	200 x 125 x 35
UB2021		Eland special	□	4000	2 x 6	200 x 125 x 35
UB2031		Duiker	□	4000	10,8	100 x 100 x 62
UB2102		PF85 PFX	■	700	9,6	56 x 62,5 x 33
UB2103		PF85 PFX	■	850	9,6	85 x 62,5 x 33
UB2104		PF85 PFX (●/is)	■	700	9,6	85 x 62,5 x 33
UB2106		502 512	■	500	10,8	100 x 59 x 23,5
UB2053		7000	□	7000	14,4	151 x 116 x 92
UB2087		730 MX	□	4000	12	200 x 125 x 35

STORNO

SERVITEK/PLESSEY



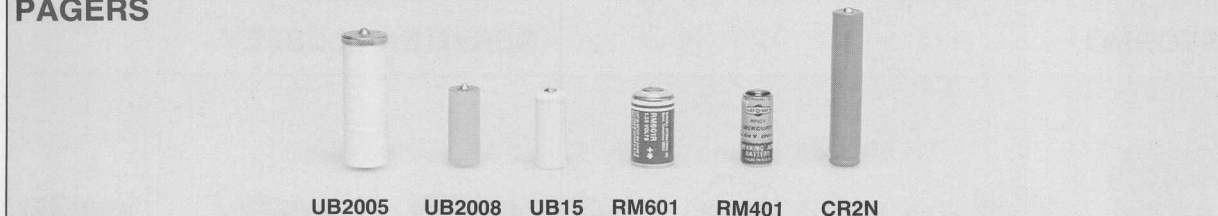
Uniross Code	Cross Reference	Used in	Case Colour	Capacity mAh	Volts	Dimensions mm
UB2095	BU803	Stornophone-800	■	500	12	63 x 32 x 94
UB2096	BU806	Stornophone-800	■	225	10,8	63 x 32 x 51
UB2097	BU807	Stornophone-800	■	500	10,8	63 x 32 x 73
UB2099	BU809	Stornophone-800 (●/is)	■	225	13,2	63 x 32 x 94
UB2100	4001		■	500	7,2	68 x 67 x 21,5
UB2101	4002		■	800	7,2	68 x 67 x 36,5
UB2079	B700	H3	■	700	12	80 x 65 x 38
UB2080	B800	H3	■	800	12	80 x 65 x 38
UB2078	B1000	H3	■	1000	12	80 x 65 x 38

MISCELLANEOUS



Uniross Code	Cross Reference	Used in	Case Colour	Capacity mAh	Volts	Dimensions mm
UB2050	GE41B025AK00201/501	Yeadu, Force, Maxon, Uniden BP-4WUTI	■	500	10,8	86,4 x 53,3 x 18,0
UB2150		Yeadu	■	700	10,8	
UB2063		Wilson BP-5W MH-200	□	500	7,2	51 x 35 x 29
UB2017	150-015742-001	Halicrafters, HC400, Kokusai	■	500	12,5	62,9 x 32 x 55
UB2052		FC4001 Emcom	■	4000	12	160 x 64 x 58
UB2062	BP2920	Sonar refill		500	15	166 x 71 x 16
UB2064		HEC 155	□	250	4,8	57 x 15 x 28
UB2106	BP11 FAST CNB-2	Standard 834S, 734L, 502, 512	■	500	10,8	100 x 59 x 23,5
UB2047	10/500	Zodiac	■	500	12	150 x 57 x 16
UB2076	RCA-M1559747C	Tac-tec rapid	■	800	10	63 x 38 x 81
UB2018		Romac, Zodiac	□	500	9,6	58 x 60 x 29
UB2075		FH116 Emcom	■	500	12	76 x 63 x 41
UB2091		PM10	■	2500	9	225 x 69 x 51

PAGERS



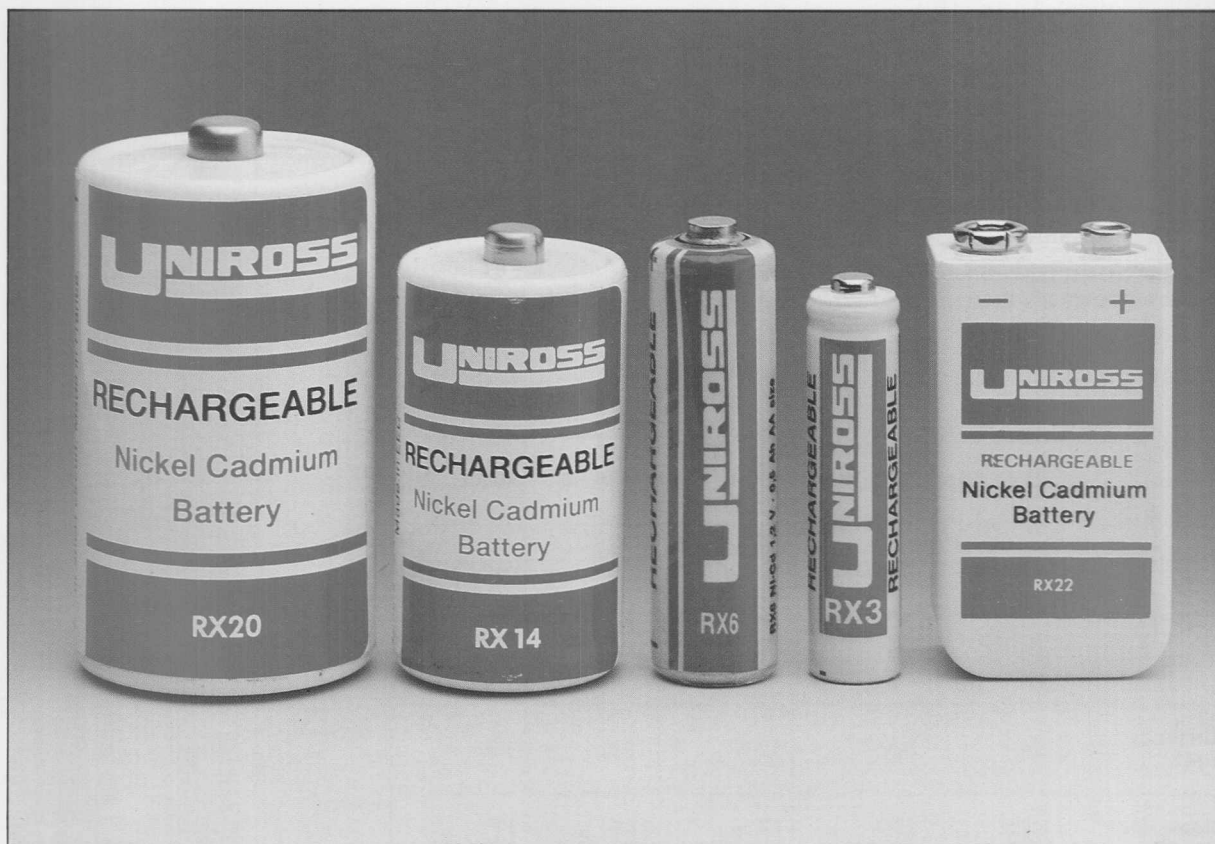
Uniross Code	Cross Reference	Used in	Case Colour	Capacity mAh	Volts	Dimensions mm
UB2081		VIP pager	□	200	3,6	17 x 53
UB2005	NLN6431 60-83009H02	Pageboy I, Tone Voice	□	170	3,9	17 x 53
UB2008	NLN6965 60-5104A01	Page comm, Pageboy II, Spirit	■	150	1,3	12 x 32
		Dimension IV				
UB15	RF654 RF753B	Multitone, Cook, Motorola	□	150	1,3	12 x 29
UB2004	PYE PGI		□	120	2,4	35 x 16 x 14,5
RM601 mercury	60-868968 E601	Pageboy I, Reach	■	1800	1,35	16,9 x 34,5
RM401 mercury	NLN6199A size 'N'	Pageboy II, Spirit	□	1000	1,35	11,4 x 29
CR2N lithium		Reach	■	1000	3	12 x 60

Chargers & Analysers

Available for following Radio/Packs

- Repco PC400, 10/8, 10/2, RPX
- Servitek 600, 800, 1000 • Yeadu • Maxon
- Uniden • UTI • Philips, SXA, SNA

Twin Chargers & Multiple Chargers,
Dual & Single Rate Chargers.
Specifications on application.



Consumer type nickel cadmium cells are used for many applications where a reliable rechargeable power source is required to replace primary throwaway batteries. These range from emergency lighting to the provision of power for critical processes such as telemetry or computer memory back up. These cells are also extensively used for powering domestic equipment such as rechargeable shavers, hedge trimmers, toys, audio, video and photographic equipment, etc.

Specifically, they lend themselves to those applications which call for one or more of the following:

1. Ability to operate in any attitude without risk of electrolyte spillage.
2. High power to weight or power to volume ratio.
3. Total freedom from maintenance.
4. Ability to operate effectively over a broad temperature range, -20° to $+40^{\circ}\text{C}$.
5. A capability of providing many thousands of charges/discharges.
6. Fully rechargeable after very long periods of being left in a discharged state.
7. Fully resealable safety vent valve mechanism, combining safety with long life.

FEATURES AND BENEFITS

Uniross consumer rechargeable nickel cadmium cells are rated at 1.2 volt nominal and the various cell shapes and sizes are so designed to be interchangeable with any non-rechargeable 1.5 volt primary battery (drycell) of a similar size.

This voltage compatibility is due to the excellent voltage retention of the Uniross nickel cadmium cell under discharge load, whereas drycells, when connected to a load, immediately drop in voltage from 1.5V to approximately 1.2V, and continues to decrease throughout their one off life.

Uniross consumer rechargeable cells are lighter than drycells, an important plus for portable hand-held battery-powered equipment.

Uniross consumer rechargeable cells are an investment, the more they are used the cheaper they become to a point where it costs less than one cent for a battery.

UNIROSS rechargeable battery

RX3 **AAA**
RX6 **AA**
RX14 **C**
RX20 **D**
RX22 **9V**

Non-rechargeable throwaway equivalent

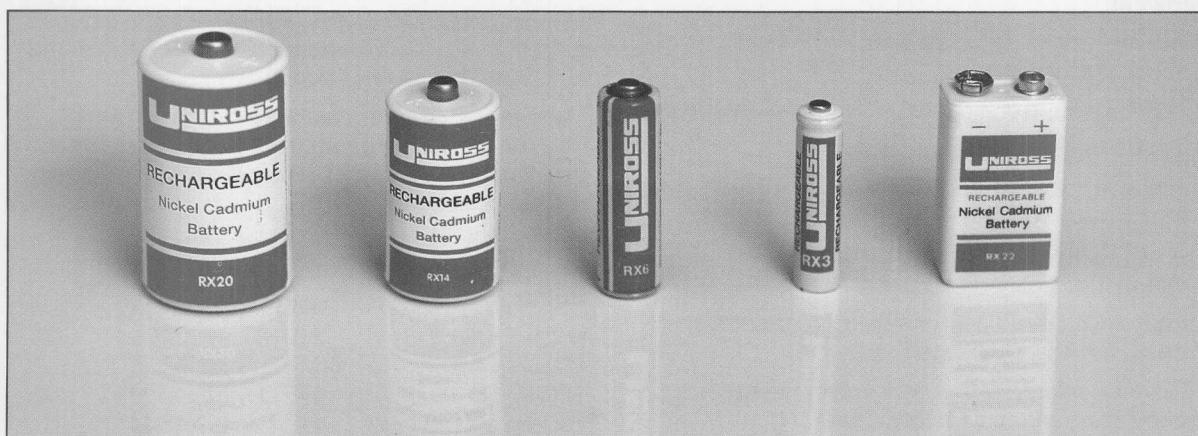
HP16 **MN2400**
HP7 **MN1500**
HP11 **MN1400**
HP2 **MN1300**
PP3 **MN1604**

The range of Uniross nickel cadmium batteries offers high quality at a competitive price. Rechargeable up to 1000 times. They may be used in all types of equipment as they are equivalent in size to throwaway batteries.

An investment for the heavy battery user – they are supplied in a discharged state and should be charged before use by a Uniross charger specifically designed to charge this type of battery system in 14-16 hours.

Supplied in individual loose form or blister packaged, the striking Uniross colours distinguish them from other battery systems and create an impact at point of sale.

Type	RX3 AAA	RX6 AA	RX14 C	RX20 D	RX22 PP3
Dimensions mm	10.3 x 44.5	14 x 50	26 x 50	33 x 61	26 x 15.5 x 48
Volts	1,2	1,2	1,2	1,2	9
Capacity mAh	180	500	1200	1200	110
Equivalent Sizes	HP16 MN 2400	HP7 MN 1500	HP11 MN 1400	HP2 MN 1300	PP3 MN 1604
Blister Qty	2	4	2	2	1
Carton Batteries	20	40	20	20	10

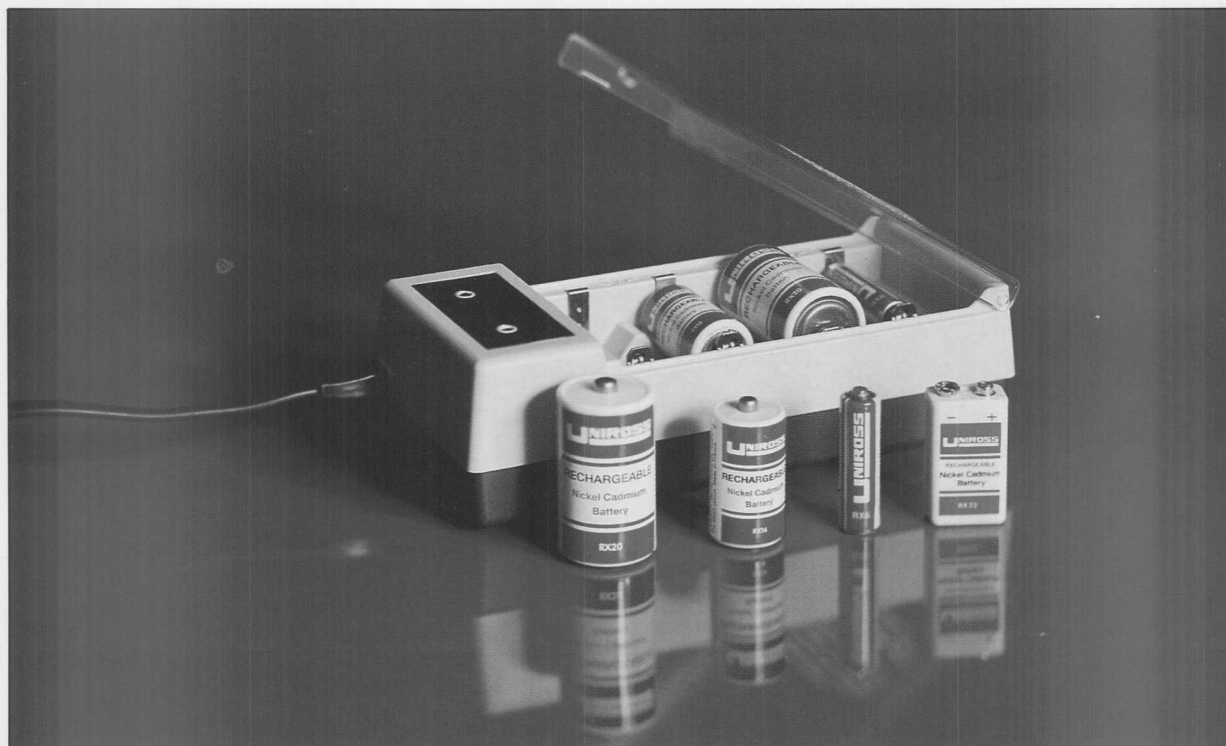




Consumer Nicad Battery Charger

Consumer Type Nickel Cadmium Battery Charger

Designed to charge battery sizes 2 or 4 RX6 AA; 2 or 4 RX14 C; 2 or 4 RX20 D; 1 or 2 RX22 PP3 or any combination of battery sizes in pairs in 14-16 hours.



Type	CX 4/Multi
Input Volts	230 V AC
Charge Time	14-16 hours
Battery Type	RX3 RX6 RX14 RX20 RX22
Size mm	210 x 100 x 65
Case Pack	Single display
Carton Qty	50 pcs

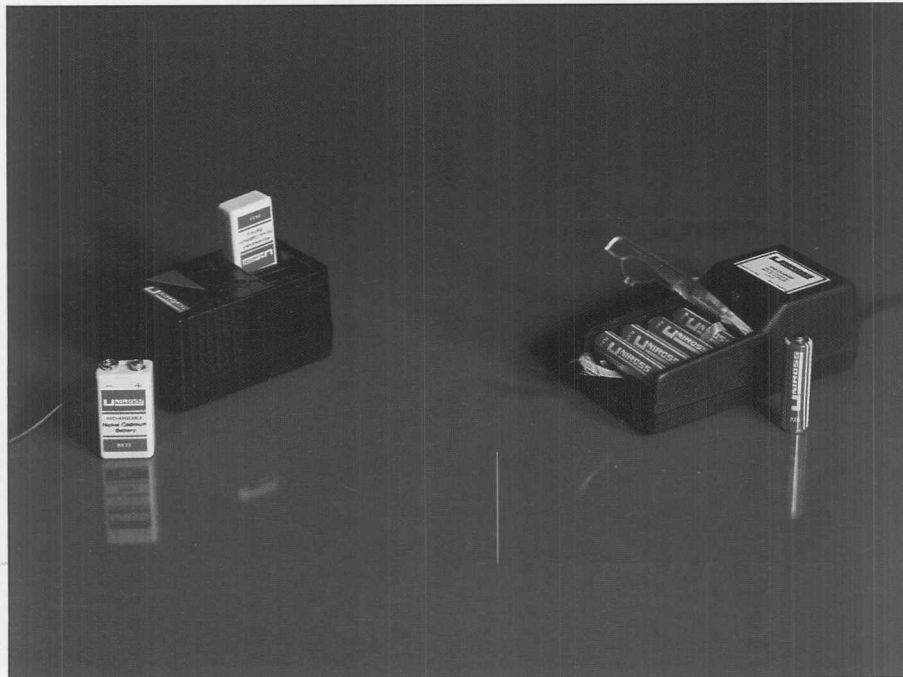


Consumer Nicad Battery Charger

Consumer or Industrial Type Nickel Cadmium Battery Chargers

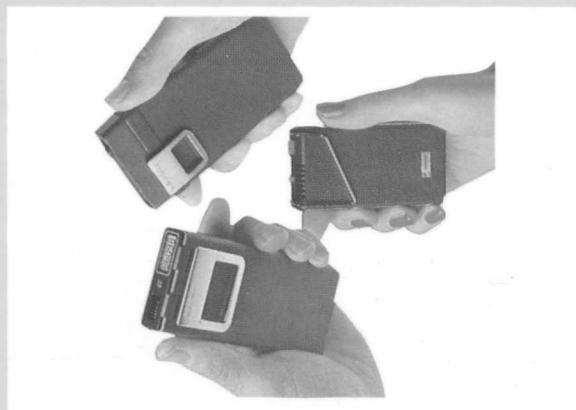
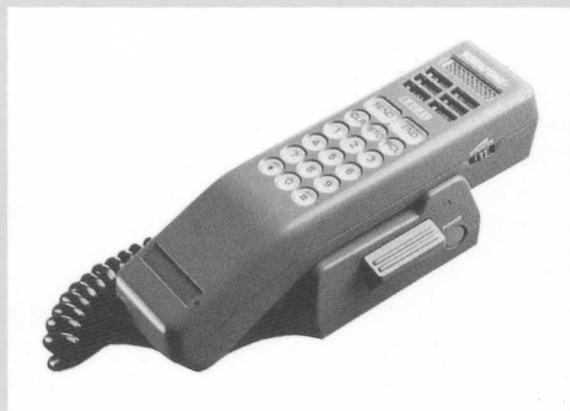
Designed to charge batteries in 14-16 hours
1 to 2 RX22

1 to 4 RX6 AA



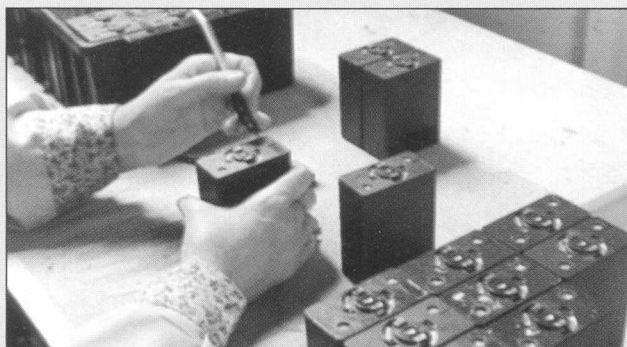
Type	CX2/22	CX4/6
Input Volts	230 VAC	230 VAC
Charge Time	14-16 hours	14-16 hours
Battery Type	RX22 PP3 9V	RX6 AA
Size (mm)	100x60x50	130x60x50
Case Pack	Single display	Single display
Carton Qty	50	50

Batteries in use

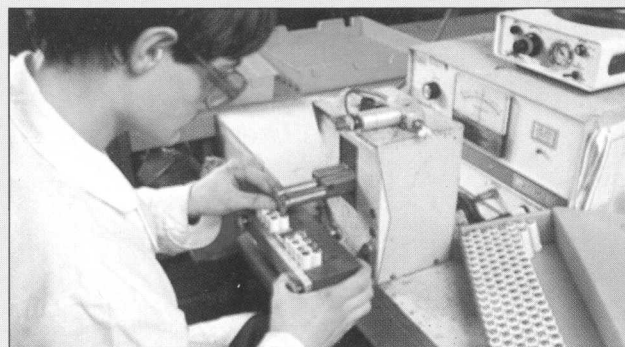


UNIROSS
BATTERIES (PTY) LIMITED

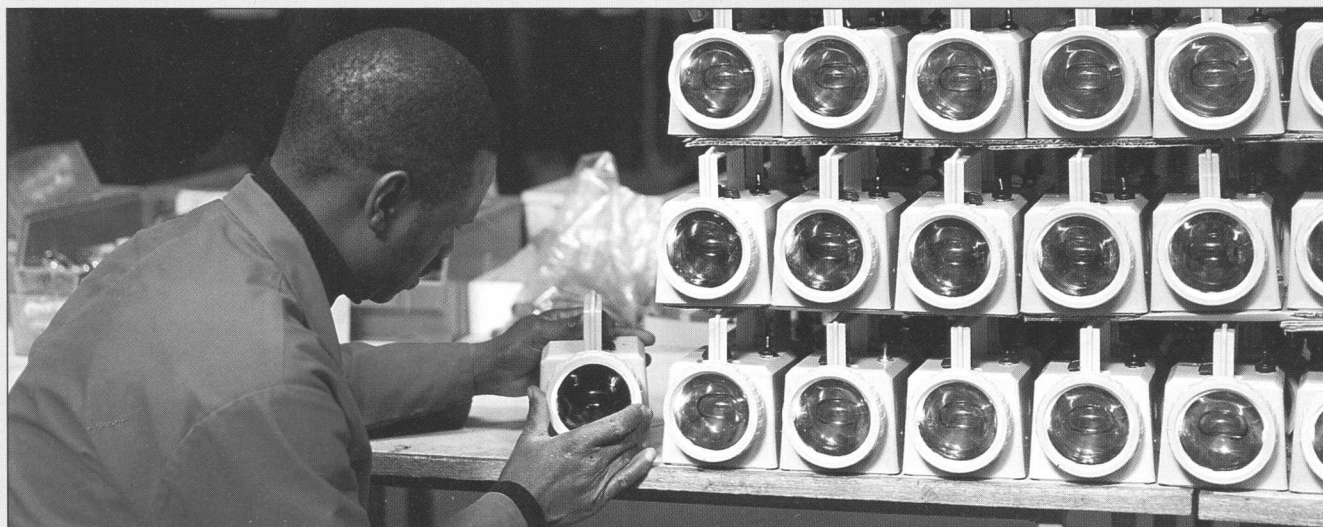
65 Ketjen Street, Pretoria West
P.O. Box 28861, Sunnyside 0132
Telephone: (012) 325-4000 (16 Lines). Telex: 3-21901. Fax: (012) 325-7491.
Co. Reg. No. 67/0048/07 Fax: (012) 26-2406.



• Batch coding of batteries



• Battery pack assembly



• Hand lamp assembly

Suppliers of:

• Nickel Cadmium Cells & Batteries

Sealed button
Sealed cylindrical
Sealed rectangular
Memoguard PCB
Vented
Aviation
Consumer

• Lithium Cells & Batteries

Lithium-thionyl chloride
Lithium-sulphur dioxide
Lithium-copper oxide
Lithium-copper oxyphosphate
Lithium-manganese dioxide
Memoguard PCB
Dataguard PCB

• Sealed Lead Acid Batteries

• Battery Packs

Communication
Pager
Medical
Video
Instrumentation
Security
Emergency lighting
Radio control & models

• Other High Technology Battery Systems

• Battery Packs & Chargers Designed to Customer Requirements